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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,274	09/28/2001	Raymond E. Wess	82011DMW	4194

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Thomas H. Close
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,274

Applicant(s)

WESS ET AL.

Examiner

Timothy J Henn

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 27 is/are allowed.
- 6) ☒ Claim(s) 19-21, 24 and 26 is/are rejected.
- 7) ☒ Claim(s) 22, 23 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/28/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the handwritten labels are difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19, 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 5,644,410).

[claim 19]

In regard to claim 19, Suzuki discloses a digital camera adapted for electronically capturing an image (e.g. Figure 8), the digital camera comprising a camera enclosure (Figure 8, Item 8); an optical system including one or more lens elements defining an optical path for forming the image (Figure 8, Item 2); a receptacle within the enclosure for receiving a removable memory card (Figure 8, Item 10; the examiner notes that the limitation of "guiding the memory card into an optical path" is considered to be an functional limitation. See MPEP §2114), wherein the memory card includes an integrated image sensor (Figure 5, Item 4) and memory device for storing one or more images captured by the image sensor when it is located in the optical path (Figure 5, Item 36; c. 2, ll. 34-38); means for sensing the presence of the memory card in the receptacle with the image sensor in the optical path (c. 8, ll. 12-30); and a camera control stage responsive to the sensing means for controlling operation of the camera (Figure 8, Item 8; c. 8, ll. 12-30).

[claim 20]

In regard to claim 20, Suzuki discloses a camera control stage that adjusts the optical system to form the image at an image plane on a surface of the image sensor (e.g. zoom; c. 6, ll. 39-45).

[claim 24]

In regard to claim 24, Suzuki discloses a memory card (Figure 8, Item 1) adapted to be removably inserted through an opening in a camera (Figure 8, Item 8), the memory card including an image sensor (Figure 5, Item 4) and a memory device (Figure, Item 36) both integrated on the card for capturing and storing one or more images when the card is inserted into a camera and the image sensor is located in an optical-image-forming path in the camera (Figures 5 and 8; c. 2, ll. 34-38).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5,644,410) in view of Saito et al. (US 6,256,063).

[claim 21]

In regard to claim 21, Suzuki discloses all limitations except for power contacts and a control stage power supply which provides power to the memory card.

Saito discloses a memory card Figure 44, Item 916) which includes power contacts (Figure 4, Item 958) that receive power from an external device (Figure 4, Item 914). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include power contacts on the memory card of Suzuki to receive power from a camera when the memory card is inserted to decrease the size of

the memory card by not requiring a dedicated memory source to be included in the memory card.

6. Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 6,256,063).

[claim 26]

In regard to claim 26, Saito discloses a memory card conforming to a PC card standard (c. 30, ll. 47-53) that includes a PC card interface (Figure 44, Item 422), the memory card adapted to be removably inserted through a slotted opening in a camera (The office notes that the memory card of Saito conforms to a PC card standard (c. 30, ll. 47-53) and is therefore capable of or "adapted to be removably inserted through a slotted opening in a camera") and including an image sensor (Figure 44, Item 422) and a flash memory device (Figure 44, Item 432; c. 18, ll. 45-47) both integrated on the card for capturing and storing one or more images when the card is inserted into a camera and the image sensor is located in an optical image-forming path in the camera (Figures 44 and 47; c. 30, ll. 25-61). However, Suzuki does not disclose an image sensor which is a CMOS image sensors.

Official Notice is taken that CMOS image sensors are notoriously well known in the art and their use allows for lower cost systems. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CMOS image sensor to create a lower cost system. Suzuki further does not discloses a memory card which conforms to the compact flash standard.

Official Notice is taken that the use of cards which meet the compact flash standard are well known in the art to provide compatibility with many standard digital cameras. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a compact flash card standard for the memory card of Saito to allow the card to be compatible with a large number of digital cameras.

Allowable Subject Matter

7. Claims 1-18 and 27 are allowed.

[claims 1-18 and 27]

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or fairly suggest a film camera including a receptacle which receives a removable memory card through an exterior opening and guides the memory card into an optical path whereby the camera is converted into a digital camera when the memory card including an image sensor is placed in front of the film image plane through the exterior opening and returns to being a film camera when the memory card is removed. Although hybrid film/digital cameras are known in the art, a camera of the specific configuration claimed is not known.

8. Claims 22, 23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

[claim 22]

In regard to claim 22, the prior art does not teach or fairly suggest a memory card including clock signal contacts, and a camera control stage further provides clocking signals to the memory card through the clock signal contacts when the memory card is fully inserted into the receptacle.

[claim 23]

In regard to claim 23, the prior art does not teach or fairly suggest a memory card including an image sensor wherein the memory card provides at least one image sensor parameter selected from a group consisting of resolution, size and aspect ratio to the camera control stage for appropriately adjusting optical object to image plane conjugates of the optical system according to the type of image sensor on the memory card.

[claim 25]

In regard to claim 25, the prior art does not teach or fairly suggest a memory card including an image sensor wherein a memory controller senses when the memory card is being used in a digital camera having its own dedicated image sensor, and wherein the memory controller causes the memory device to store images captured by the dedicated sensor rather than the sensor integrated on the memory card.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art further shows the current state of the art in hybrid film/digital cameras:


- i. Sato US 6,426,777
- ii. Stern et al. US 6,370,339

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
9/15/2004


TUAN HO
PRIMARY EXAMINER